

ABSTRACT

[094] Systems and methods are provided that facilitate the formation of micro-mechanical structures and related systems on a laminated substrate. More particularly, a micro-mechanical device and a three-dimensional multiple frequency antenna are provided for in which the micro-mechanical device and antenna, as well as additional components, can be fabricated together concurrently on the same laminated substrate. The fabrication process includes a low temperature deposition process allowing for deposition of an insulator material at a temperature below the maximum operating temperature of the laminated substrate, as well as a planarization process allowing for the molding and planarizing of a polymer layer to be used as a form for a micro-mechanical device.